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09/631,301	08/02/2000	Yasunari Kimura	JEL 31225	8435

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EXAMINER

LE, DAVID Q

ART UNIT PAPER NUMBER

3621

DATE MAILED: 02/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/631,301

Applicant(s)

KIMURA ET AL.

Examiner

David Q Le

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003 and 17 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/631,301.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Art Unit: 3621

DETAILED ACTION

Examiner's Note

1. Examiner has pointed out particular references contained in the prior art of record in the body of this Action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to specific limitations within the individual claims, other passages and figures may apply as well. It is requested from the Applicant, in preparing the response, to consider in full the entire references as potentially teaching all or part of the claimed invention, as well as the context of the cited passages of the prior art as disclosed by the Examiner.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 November 1993 has been entered.

Concurrently and as requested in the above submission, a previous Amendment filed under 37 CFR 1.116 on 17 September 2003 has also been entered.

Status of Claims

3. Per the Amendment filed under 37 CFR § 1.116 on 17 September 2003:

Claims 1-6 were amended.

Claims 7-16 were added.

Claims 1-16 now remain pending.

Response to Request for Reconsideration and Arguments

4. The request for reconsideration and arguments presented in the Amendment filed under 37 CFR 1.116 on 17 September 2003 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Foladare et al.**, US Patent No. 5,914,472 in view of **Ratayczak et al.**, US Patent No. 6,259,909 B1.

As per **claims 1 and 2**:

Foladare discloses

An authentication [method and apparatus] comprising the steps of:

(a) receiving a first identifier and a first password from a user through an open information communication line (Abstract; Figs 1 and 2, related description; Col. 4, L11-27);

Art Unit: 3621

(b) identifying her the user by comparing information a first identifier and a first password registered in a member database and the first identifier and the first password received from the user (Abstract; Figs 1 and 2, related description; Col 4, L35-39: "database");

(c) connecting to a mobile communication terminal of the member user through a mobile communication line by using a mobile communication terminal number registered in said member database as a second identifier of the user when the member user is identified (Fig 1: steps 110-112; Fig 2, steps 210-216, related descriptions; Col 4, L39 – Col 5, L8); and

(d) receiving [confirmation of the transaction authorization from] the user from the connected mobile communication terminal (Fig 1, steps 116, 120, related description; Col 3, lines 2-33); and

(e) authenticating the user, if the received [confirmation] from the user [matches user information] in said member database (Figs 1 and 2, associated description; all above citations).

Foladare does not specifically recite using an authentication system with two sets of user identifiers and passwords. However he does teach that the confirmation step whereby the user is contacted by the authentication system may comprise (1) many different communication methods (two-way pager, cellular phone, other personal communication devices) (Col 4, L58 – C5, L8) and (2) many different user responses for approval and disapproval of a transaction (voice command, yes/no, keypad inputs – i.e. a code or password) (Col 5, L2-8). It would have been obvious to one ordinarily skilled in the art at the time the invention was made that among those responses a second set of member identifier and password may be predetermined, for the user to communicate approval or disapproval to the authentication system. Such an embodiment of *Foladore's* invention would have made the process of responding faster and more reliable, both from the user's perspective and from the authentication system's.

In addition the above obviousness and motivation analysis, *Ratayczak* is another prior art directed to a method and apparatus for authentication of a user wherein the use of two sets of identifiers and passwords, communicated through two independent and separate channels is clearly taught (Abstract; Col 1, L45-55; Col 2, L4-13; C2, L28-34: "code words" in this context are synonymous with "passwords"; Figs 1-2, 7, associated description).

Therefore it would have been obvious to one ordinarily skilled in the art at the time the invention was made to have combined the above features of *Foladare* and *Ratayczak* in an embodiment of an authentication system as recited in claim 1. Such a system would provide a strong, secure, reliable, yet convenient method for independently confirming the identity of a user and his/her access to remote assets or to secure the user's confirmation of transactions requested on his/her behalf.

Art Unit: 3621

As per claims 3 and 5:

Foladare discloses

An accounting [method and apparatus] comprising the steps of

(a) receiving a first identifier and a first password from a user and an accounting amount relating to a service, through an open information communication line (Foladare : Col 5, L28-36; Col 6, L16-33);

(b) identifying the user by comparing a first identifier and a first password registered in a member database and the first identifier and the first password received from the user (see Foladare citations from claims 1-2 above);

(c) requesting connection connecting to a mobile communication terminal of a debtor through a mobile communication line by using a mobile communication terminal number registered in said member database as a second identifier, when the member user is identified (see Foladare citations used in claims 1-2 above);

(d) inquiring approval or rejection of a payment of a charge to the debtor (see Foladare citations in claims 1-2 above); and

(e) registering the accounting amount in said member database together with an information about service presentation and deducting the accounting amount from a bank account registered preliminarily (Foladare : Col 5, L28-36; Col 6, L16-33),

Foladare does not specifically recite

when a second password received from said mobile communication terminal coincides with a second password registered in said member database.

However *Ratayczak* teaches the above additional limitation of claims 3 and 5 (see *Ratayczak* citations from claims 1-2 above). Using the same obviousness and motivation analysis as for claims 1-2, it would have been obvious to one ordinarily skilled in the art at the time the invention was made would have combined the features of the two cited references to provide an accounting method and system which would be safe, secure, while convenient for both users and system operators alike.

As per claims 4 and 6:

Foladare in view of *Ratayczak* disclose all the limitations of claims 3 and 5.

Foladare further discloses

Art Unit: 3621

receiving a facility ID information of a facility for the service presentation, through the open information communication line; and identifying the facility (In Col 3, lines 30-33, Foladare discloses that a merchant name is a component of the information transmitted and used for authorization).

As per claims 7-8:

Foladare in view of Ratayczak disclose all the limitations of claims 3 and 4.

Foladare further discloses

connecting to the mobile terminal of the user as the debtor, when the user is identified; and inquiring for the approval or rejection of the payment of the charge to the user (see all citations used above).

As per claims 9-10:

Foladare in view of Ratayczak disclose all the limitations of claims 5 and 6.

Foladare further discloses

said mobile communication authentication means connects to the mobile communication terminal of the user as the debtor, when the user is identified (see all citations used above).

As per claims 11 and 13.

Foladare discloses

An authentication [method and apparatus], comprising:

(a) receiving information of a user at a point of service (POS) terminal (Col 4, L11-23);

(b) obtaining an identifier of a communication terminal of the user based on the received information (see all citations already used above);

(c) establishing a communication link between a signal source and the communication terminal using the communication terminal identifier (see all citations already used above); and

(e) establishing authentication of said user when the signal received by said signal source matches the signal sent by said signal source (see all citations already used above).

Foladare does not explicitly recite

Art Unit: 3621

(d) communicating a signal through a path comprising one of: (i) a path from the signal source to the communication terminal, from the communication terminal to the POS terminal, and from the POS terminal back to the signal source and (ii) a path from the signal source to the POS terminal, from the POS terminal to the communication terminal, and from the communication terminal back to the signal source;

Foladare discloses that the user may initiate a transaction at a merchant POS, the POS sends the request for authorization to the authentication system (Applicant's "signal source"), the system will contact the user's communication terminal, and the user's communication terminal will forward a response back to the system, for final authorization.

Ratayczak teaches that such an authentication system may use many permutations of the sequence of communications between a user, POS terminal, and authentication center. Fig 5 of *Ratayczak*, in particular shows how a user causes a POS terminal (C1) to send a request to a signal source (A) for authorization of a request. The signal source (A) then sends a query to the user's communication terminal (C2). The user communication terminal (C2) then forwards the appropriate response to the POS terminal (C1). The POS terminal (C1) then forwards the user response back to the signal source (A). When the signal source (A) determines that the response is correct (from checking the user's information in a database S), the transaction requested is authorized (see Fig 5, associated description).

Therefore it would have been obvious to one ordinarily skilled in the art at the time the invention was made that features as described above from the cited references may be implemented, in order to provide a strong, secure authentication and transaction confirmation system, particularly when the embodiment includes a POS terminal. Such a method and system would allow users to prevent any fraudulent or unauthorized charges from being made against their account without their express approval.

As per **claims 12 and 14**.

Foladare in view of *Ratayczak* disclose all the limitations of claims 11 and 13.

Foladare further discloses

step (b) includes correlating the received member information with corresponding information stored in a database to obtain said identifier from the corresponding information (see all citations already used above).

Art Unit: 3621

As per claim 15.

Foladare in view of *Ratayczak* disclose all the limitations of claim 13.

Foladare further discloses

the link establishment means establishes the communication link in response to a stimulus originated by the signal source (Col 5, L37 – C6, L3).

As per claim 16.

Foladare in view of *Ratayczak* disclose all the limitations of claim 13.

Foladare further discloses

the signal source generates the communicated signal (Col 5, L37 – C6, L10);

the authorization means authorizes the event if the received condition of the signal communicated through the circuit indicates a likelihood of matching the signal generated by the signal source (same citation as above); and

the authorization means does not authorize the event if the received condition of the signal communicated through the circuit indicates a likelihood of not matching the signal generated by the signal source (same citation as above).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q Le whose telephone number is 703-305-4567. The examiner can normally be reached on 8:30am-5:30pm Mo-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P Trammell can be reached on 703-305-9768. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.


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DQL